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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,903	12/22/2000	David Weigand	68135469.206800/P04793	1918
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WILDMAN, HARROLD, ALLEN & DIXON 225 WEST WACKER DRIVE CHICAGO, IL 60606				
			EXAMINER VINCENT, DAVID ROBERT	
			ART UNIT 2661	PAPER NUMBER 7

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/746,903

Applicant(s)

WEIGAND, DAVID

Examiner

David R Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8 and 11-13 is/are rejected.
- 7) ☐ Claim(s) 4, 5, 9, 10 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kohlschmidt (US 6,029,061).

Kohlschmidt discloses receiving a first plurality of frame programs (repeating frames/slots in a TDMA/GSM environment col. 6, lines 56-67; "normal mode", Fig. 5), generating a first interrupt (not further defined; using an interrupt to start a TDMA protocol process, col. 5, lines 12-21; Fig. 5, col. 7, lines 57-64) at a first predetermined offset (not further defined) from a starting point (waking-up using counters and re-synchronizing with the TDMA frames in order to generate TDMA frames; sleep period 488 μ sec, col. 7, lines 1-42; sleep period, col. 3, lines 28-32; sleep mode timer CALSTM, Figs. 1 and 3, cols. 6-7; using GSM 1/4 bits, col. 6, lines 56-67; setting a spinup interval, col. 7, lines 11-21; using an interrupt to wake up before going into normal operations, Fig. 5), receiving a

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first frame program (generating GSM frames in normal mode, Fig. 5), generating a second interrupt (not further defined, reads on taking place a day later or any time after the first time a systems wakes up and goes back to sleep), receiving a second frame program (not defined as being different from the first program, reads on waking up a second time and running the same program, also read on transmit mode and receive mode), determining a first starting address associated with first memory region (the processors and the DSP disclosed are running programs that are stored in memory locations and must therefore know where the programs in order to be running them), and using registers col. 4, lines 31-51; col. 7, lines 43-67).

Kohlschmidt also discloses that other processor configurations can be used (col. 4, lines 63-65). Kohlschmidt fails to particularly call for a frame program, and a plurality of frame programs, as specified in claims 1.

It is considered obvious that in the "normal mode" there are a plurality of frames. Also, a first interrupt can be for the DSP (Fig. 5) and a second can be for the protocol processor (col. 5, lines 12-16).

Claim Rejections - 35 USC § 103

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Claims 1-3 are rejected under 35 U.S.C. 103(a) as being obvious over Kohlschmidt (US 6,029,061), as set forth above in view of Levy (US 5,524,008).

Kohlschmidt also discloses that other processor configurations can be used (col. 4, lines 63-65). However, Kohlschmidt fails to particularly call for a frame program, and a plurality of frame programs, as specified in claims 1, and 6; a third frame program, as specified in claim 2.

Levy teaches first-third frame programs (Fig. 1A; col. 1, lines 11-50, and a series of frames, col. 1, lines 15-22; a third frame program, col. 4, lines 10-27), and that a set of instructions in computer terminology is a program and in the TDMA environment a frame program (col. 2, lines 50-67; col. 4, lines 10-27).

It would have been obvious to combine the two references because it is notoriously well known that a GSM/TDMA mobile in "normal operations" will be sending and receiving a plurality of frames comprising a plurality of slots. Using a plurality of frames would allow for faster or more seamless communication. It is also well known that interrupts are used to get a controller or microprocessor type device to start reading a series of instructions (running a program). Using interrupts allow for a program to be immediately.

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Claims 6-8, 11-13 are rejected under 35 U.S.C. 103(a) as being obvious over the combination of Kohlschmidt (US 6,029,061), and Levy (US 5,524,008), as set forth above, in view of Weigand (US 5,822,308).

However, the combination of Kohlschmidt and Levy fails to particularly call for using a microsequencer.

Weigand teaches using a microsequencer (124, Fig. 7), and interrupt (135, Fig. 9; col. 7, lines 40-54), a frame program (col. 2, lines 40-67), storing the programs in memory (col. 6, lines 25-44; col. 8, lines 25-67), executing a first frame program (series of instructions; various routines, col. 2, lines 26-67, col. 8, lines 64-67; transmit routine, col. 8, lines 20-42; building frame slots, col. 6, lines 25-44; build slots, col. 5, lines 20-30), a first region of memory (two subroutines cannot be written over each other at the same memory location), starting addresses (opcodes cause the microcode to jump to routine, col. 3, lines 41-55; stored in a RAM, col. 6, lines 26-44; address of instructions, col. 8, lines 20-67, specially lines 26-39), programs being relative to starting addresses (locations in RAM are sequential and subroutines are stored at specific locations so they can be found when needed, col. 8), setting an indicator (opcodes, col. 3) to indicate a region of memory of a program (using opcodes, col. 3, lines 41-55; col. 7,

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lines 40-54, col. 8, lines 20-42), a microsequencer (124, Fig. 7), a register bit set by a microsequencer (Fig. 9 or cols. 7-8, especially, col. 7, lines 40-54), and an instruction decoder (synchronizing to the TDMA frame, using ICU, col. 8, lines 20-42; opcodes being sequence, col. 7, lines 55-60; the microprocessor reads/decodes the opcodes, col. 7, lines 20-39).

Since Kohlschmidt discloses that other processor configurations can be used (col. 4, lines 63-65), it would have been obvious to use a microsequencer to save power and battery life of the mobile.

3. Claims 4-5, 9-10, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 4, 9, and 13 are considered allowable since when reading the claims in light of the specification, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in the claim including the details of the register bit and using a split address, as specified in claims 4, 9, and 13.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R

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Vincent whose telephone number is 703 305 4957. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703 305 4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David R Vincent
Primary Examiner
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May 19, 2004